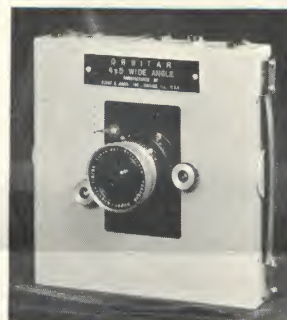


ORBITAR VIEW



Banquet pictures can be made with all Orbitor cameras. Sharp pictures of entire banquet are easily made.



Raise or Lower Lens. (4x5)



Rear View of Camera

# THE NEW B.&J. WIDE ANGLE ORBITAR® CAMERA

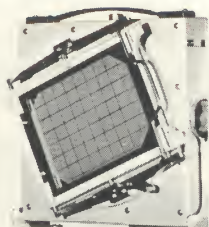
*New! — Practical! — Modern!* CAMERA SIZE ONLY 4 3/4" x 8" x 8"—WIDE ANGLE 95°

## A Real Practical Camera for:

PICTORIAL — NEWS WORK — POLICE WORK — CLOSE UPS — AERIALS  
ARCHITECTURAL — COMMERCIAL — SPORTS — WEDDINGS — BANQUETS, Etc.

An extreme Wide Angle, All Metal 4 x 5 Camera with a 360 degree Revolving Back, the lens is the famous 65mm Super Angulon f:8 in Compur MX Shutter and installed in a Burke & James finest Micrometer Focusing Mount with a range of less than three feet for real close up work plus a beyond infinity scale for aerials and distance work. Clips or shoes installed for flash guns and view finders, and Spirit Level. Corrosion proofed. Used by leading magazine and successful photographers.

This beautiful all metal (no bellows) camera has all conveniences such as a completely revolving back that can be positioned any part of circle. The front board raises and lowers by a special geared knob — 2 tripod sockets are installed for special work. A deluxe handle is mounted on camera for hand carrying and operation.



Full 360° revolving back permits use at any desired angle for best composition. Easy free manipulation with positive lock lever when desired angle is found.

Easy loading of cutfilm holder in camera is ensured by the large lever release. It pulls the ground glass retainer away and opens the holder socket with ease.

CAMERA WEIGHT ONLY 4 pounds, Case size only 10 1/4 x 13 1/4 x 6 3/4.

**No. 1315A(W)** 4x5 All Metal Wide Angle Orbitor Camera complete with Super Angulon 65mm f:8 in Compur MX Shutter, in special fitted carrying case ..... **\$399.50**

**No. 1316A(W)** 4x5 Wide Angle Orbitor Camera same as No. 1315A with Graflok Back instead. Sold only complete with Special Fitted Fibre Carrying Case ..... **\$499.50**

**No. 1322-A(W)** Special wide angle Optical View Finder for the Orbitor Wide Angle Cameras ..... **\$29.50**



**No. 1321-A(W)** 2 1/4 x 3 1/4" all Metal Orbitor Wide Angle Camera, with genuine Graflok back that will take all accessories such as roll film holder, detachable ground glass for quick focusing. Polaroid Graflok accessories will fit this camera. Camera, because of being compact does not have a revolving back but tripod screws are so placed that reversing on tripod is very easy. Furnished complete with 120 size roll film holder, ground glass, and carrying case. Lens is 47mm Super Angulon with B&J special focusing mount, in high speed Compur MX shutter. Outfit weights complete only 4 pounds. Just the unit for extra color or black and white pictures. Price only, with case and lens ..... **\$449.50**

**No. 1319-A(W)** 8x10" WIDE ANGLE ORBITAR CAMERA (8x10 Picture Size). Same type as 4x5" but with wooden body—metal sliding front board—reversible 8x10 Wood Back (Not Revolving)—Complete with 4 3/4" f8: Super Angulon Lens in Compur MX—Micrometer Focusing Mount—Body Size 12"x12"x7 1/2". Weight 9 lbs. Complete with fibre carrying Case—Price..... **\$589.50**

MANUFACTURED IN U.S.A. BY BURKE & JAMES, Inc.

**Burke & James, Inc., 321 So. Wabash Ave., Chicago 4, Ill.,**



**312-427-8393**



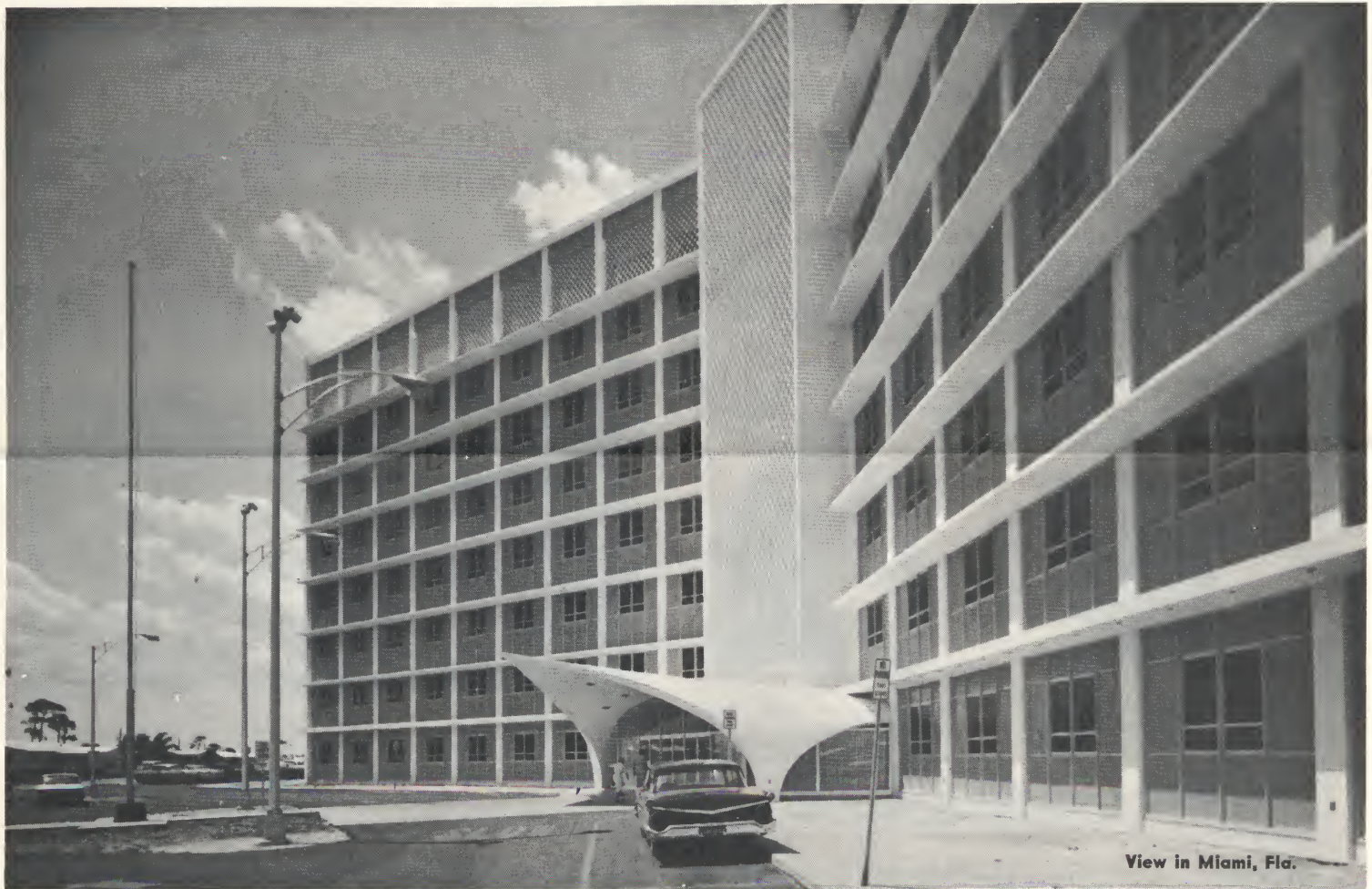
THIS ENTIRE PHOTO WAS MADE IN ONE SHOT  
**SUPER WIDE-ANGLE ORBITAR®**  
**4x5 CAMERA**  
**NEW!**



THIS SMALL AREA (Enclosed in white) is the size picture normally taken with 6" Lens.  
 (Standard Equipment on 4x5 Cameras)



View in Chicago, Ill.



View in Miami, Fla.

FRONT BOARD and Lens is Raised and Lowered by Smooth Gear Knob.  
 Special ORBITAR® WIDE ANGLE CAMERA features, invaluable for Architectural and similar work. With the camera in the same position, a number of desired views top and bottom are possible!—This is a very special unique feature and puts the Orbitar® in a class by itself.

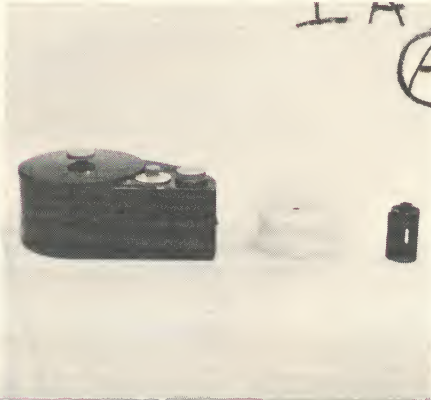
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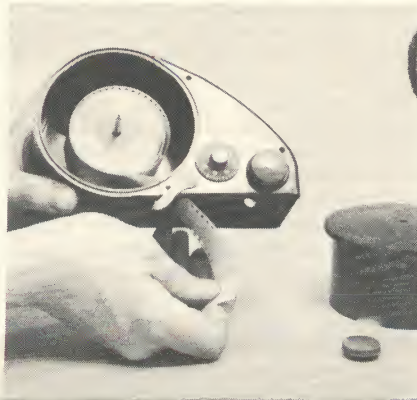
# BULK LOADING: By E. PETER SCHROEDER

By E. PETER SCHROEDER

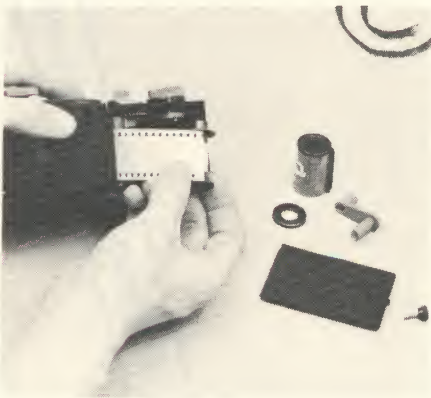
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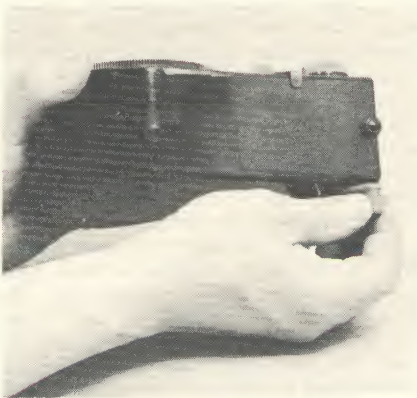
**Watson Model 66** daylight loading tank allows easy loading of cartridges outside of dark-room after tank is loaded with bulk film roll.



**Bulk roll** is placed in main film chamber in total darkness. After cover is put on and light trap closed, loader can be used in light.



**Bulk film** runs from inner chamber through light trap into outer loading chamber which is closed by a light-tight door as cartridge is loaded.



**Film-winding crank** is inserted in bottom of loader and proper number of frames are wound off into cartridge. Dial on top counts frames.



**Special care** must be taken that ends of cartridge are firmly clipped on in darkness. If they fall off in light, film will be fogged.



**Leitz template** can be used to cut tongue of film to proper shape for use in camera. Lacking template, tongue can be cut with scissors.

**W**hether or not to bulk-load his film is a question which occurs sooner or later to every 35-mm photographer who is out of the occasional-snapshot class. The answer to the question is more complicated than it might seem at first glance and there are many arguments pro and con.

The most obvious advantage to buying film in bulk and loading your own cartridges is the saving in film cost. If you shoot a 35-mm roll of black-and-white (36 exposures) a week, you can save up to \$140 a year by loading your own film. Bulk rolls of film sold in 27½, 50, or 100 ft lengths to make five, nine, or 18 loads of 36 exposures, costs about a penny per exposure rather than about three cents if bought in cartridges. But film economizing is not the only advantage to loading your own film. There are films on the market today, such as color duplication, high-speed infrared, and copy films that are supplied in bulk only. Also, how many times have you heard a statement like, "Yes, a 35-mm camera certainly is versatile but you always have to take so many pictures before you can develop the film." Here is your chance to load as little film as you wish, for special jobs where you may not need a full cartridge.

An unusual advantage to using bulk film was graphically pointed out to me by a pro who recently came back from an assignment in Europe. Custom regulations of the country in which he was working limited him to taking three rolls of film across the border. The rolls he carried were three 100-foot bulk rolls—plus a daylight tank and extra cassettes.

Balanced against these obvious advantages of bulk-loading are what some consider attendant disadvantages. Most of these seem to have their roots in carelessness or laziness on the part of the photographer. One of these problems is scratching the film. Usually these scratches are picked up in the cassette rather than the bulk loader, as most daylight loaders are designed so that the film does not rub over any surface. If great care is not taken scratches can be picked up from dust in the light trap of a re-used film cartridge. Another problem which can result from using a bad cartridge is fogging of the film due to an end which is bent or does not fit tightly enough. After all, these cartridges are not designed to be re-used. If you do re-use one of these commercial cartridges it pays to be very careful that you do not have a faulty one. A good solution to this problem is to use the special cassettes for bulk loading supplied by several of the camera manufacturers (Leica, Contax, Exakta, etc.). While these special cassettes are

(Over)

\* Reprinted from the March (1959) issue of Popular Photography.



## Bulk Loading *continued*

costly as an initial investment they are a good investment in the long run. This is particularly true if you process your own film. These cassettes have specially designed light traps which cannot possibly scratch the film. If the film is sent to a commercial processor arrangements must be made to get your cassettes back (always the danger of losing one) and also the cassette is tied up and cannot be used during the time the film is being processed.

In asking many photographers why they don't bulk-load their film a common answer is, "It's too much trouble." In the final analysis this seems to be the biggest objection to bulk loading.

At this point it should be obvious that I'm in favor of bulk-loading film. I've been doing it for years and have only occasionally run into trouble. On those few occasions of scratched or fogged film, the problem could have been avoided with a little extra care.

Here are two of the simplest methods by which you can reload cartridges with a minimum of effort, i.e., by using a daylight loading tank (shown here is a Watson 66 tank; price: \$11.95) where all manipulations—except the initial loading of the bulk film in the tank, which must be carried out in total darkness—can be done in daylight; or by using a hand film winder (E. Leitz; price: 60 cents). However, this latter method requires a totally darkened room for loading.

If you buy bulk film in the 27½-ft. length, you will find that it is tapered and tongued after every 36 exposures. The tapered end is for insertion in cassette spools and the tongue, of course, is for threading into the camera take-up spool. A word of caution, before becoming too deeply entrenched in saving money in bulk film, beware of so-called "short end" bulk moving-picture film bargains because not all 35-mm film is designed for use in your miniature camera. Few movie films have an anti-abrasion backing, in other words, this type of film is more prone to scratches than 35-mm still camera film. Further, movie film because of its inherent characteristics may not render the same results you have obtained using factory loaded cartridges or still camera bulk film.

With a quick-drying and nonchipping enamel we paint half of our reload cartridges black and then number them. Those numbered up to ten are always loaded with high-speed black-and-white film, and the cartridges numbered eleven and above contain tungsten color film. Cartridges loaded with film for average daylight photography are numbered only, not painted. Those cartridges numbered to 10 contain medium-speed black-and-white film and from 11 and above contain daylight color. Once the film is loaded in the cartridge it is numbered on the tongue with a regular ink pen to coincide with the number of the cartridge. If by chance the film is scratched (in the last three years I have had only one roll scratched beyond use) the faulty cartridge can be traced and then discarded.

Now assuming that you are about to load your film cartridges, it is well to keep several things in mind. Check these thoroughly: Make sure the felt is in good shape; that it is not frayed, or tearing away from the cartridge lips. Also check to see that there are no dust particles or grit on the felt. Make sure that the cartridge and end rings are not misshapen. Once in a while clean out the inside of the cartridge with a damp cloth. Remove adhesive paper used by the factory to hold

film to spool and replace it with 2½-in. lengths of ½-in. masking or medical adhesive tape. Avoid loading film in a dusty room. Always make sure your hands are clean and dry. Handle film at the edges! A damp sponge once over the surface on which you place the film, tank, or film winder, and cartridges will render it free of dust or photo chemicals which may have accumulated. And lastly don't overload the cartridge spool because tightly loaded film can cause "cinch" marks, or you may find upon developing that you cannot get all the film onto the reel.

Most daylight film-loading tanks work basically alike. They require no skill to use. Thus by following a few basic directions you will be assured good results. Here in a few simple steps is how to load bulk film with a Watson Model 66 Daylight Loader. First, *in total darkness*, load the bulk film in the bulk-film chamber. Pull out about two inches of leader through the rectangular opening of the light trap. Replace top on main film chamber, screw into position, and lock. Close light trap. *Now you can turn on the light.* Take reload cartridge, open, and thread film to spool with adhesive or cellulose tape. Make sure at least ¾ inch of tape engages the film. Insert spool with film attached into cartridge, slip on end rings, checking to see that they have clicked into proper position on the cartridge. Then place cartridge in the take-up chamber and close light-tight door. Set film counter to 37 which allows for tongue cutting. Insert film winding crank and turn until desired number of frames registers on the film counter. Close light trap. Open light-tight door and snip off film from bulk leader. Remove reloaded cartridge by pulling up on bearing.

Using the hand film winder is just as easy, if not easier to load your own once you become accustomed to working in total darkness. First decide how many cartridges you will load and line them up in front of you. Now, in total darkness, pick up the cartridge spool, with your right hand, attach the film under ¾ inch of adhesive tape on spool. With the left hand holding the bulk film and spool, pick up hand film winder and insert it into the keyed base of the spool. Now wind film on spool holding bulk film about six inches away from it. Through experience you will learn how many turns are needed to wind a certain number of frames on the film (I have found that each turn winds off about ½ frame). Next remove winder, and with left hand holding bulk film and loaded spool, cut the film with a pair of scissors. Insert spool in cartridge and clip on end rings.

If you have loaded film which has no tongue, you should immediately cut tongues after reloading all cartridges because later when you load your camera, you probably won't have scissors handy and undoubtedly will be in a hurry. Cutting a tongue can be done with a pair of scissors. The tongue should be at least four inches long. However, for complete accuracy and thus eliminating the possibility of film chips, which can easily jam your camera, use a template (E. Leitz; price: \$2.40) to give the proper length and shape. That's all there is to loading film.

One last tip: since you will be buying a substantial amount of film, *check* the film date on the box in which it is packed. This date should be at least nine months to a year ahead of the purchase date.—

**Burke & James, Inc.** 321 South Wabash Avenue, Chicago 4, Illinois, U.S.A.